

What is Claimed is:

1. A distributed network for delivering data to a plurality of users, comprising:
a multi-tier server network comprising a plurality of data servers and a connection
5 network connecting said data servers, said data servers being grouped into at least one first
group and at least one second group, such that a said first group comprises at least one first
data server adapted to deliver first data to a first group of said users and a said second
group comprises at least one second data server adapted to deliver second data to a second
group of said users which is a subset of said first group of said users; and

10 a content distributor which, based on information pertaining to requests for said
content by said first and second groups of users, is adapted to deliver said first data to said
at least one first data server and said second data to said at least one second data server
while bypassing said connection network.

15 2. A distributed network as claimed in claim 1, wherein:
said multi-tier server network further comprises a master group comprising at least
one master data server, said master data server being adapted to deliver third data to at
least one user in a said first group and at least one user in a said second group; and
said content distributor is further adapted to deliver said third data to said at least
20 one master data server.

3. A distributed network as claimed in claim 2, wherein:
said at least one master data server is adapted to deliver said third data to any said
user in said first group and any said user in said second group.

25 4. A distributed network as claimed in claim 2, wherein:
said at least one master data server is adapted to deliver said third data to each said
user in said first group and each said user in said second group.

30 5. A distributed network as claimed in claim 1, wherein:

each second server in said second group is electrically closer to its respective said users in said second group of users than a said first server in said first group is to said users in said second group of users.

5 6. A distributed network as claimed in claim 1, wherein:
said first and second data servers in said first and second groups, respectively, are
geographically distributed such that each said first data server is adapted to serve said first
data to a plurality of second groups of users.

10 7. A distributed network as claimed in claim 1, wherein:
said content distributor is adapted to deliver at least a portion of said first or second
data to at least some of said first or second data servers in said first and second groups,
respectively, via a satellite link to bypass said connection network.

15 8. A distributed network as claimed in claim 1, wherein:
said content distributor is adapted to deliver said first and second data substantially
directly to at least some of said first or second data servers in said first and second groups,
respectively, via a distribution network which is distinct from said connection network.

20 9. A distributed network as claimed in claim 1, further comprising:
a data collection network, adapted to collect data from content providers for
distribution as said first and second data by said content distributor.

25 10. A distributed network as claimed in claim 9, further comprising:
an encoder, adapted to encode said data collected by said data collection network to
generate said first and second data.

30 11. A distributed network as claimed in claim 1, further comprising:
a content delivery director which, in response to a data request from a requesting
said user, is adapted to direct a said first data server or a said second data server to deliver
said requested data to said requesting user.

12. A distributed network as claimed in claim 11, wherein:
said content delivery director is adapted to direct a said second data server to
deliver said requested data to said requesting user unless said second data server is
incapable of delivering said requested data to said requesting user.

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13. A distributed network as claimed in claim 12, wherein:
said content delivery director is adapted to direct a said first data server to deliver
said requested data to said requesting user when said second data server is incapable of
delivering said requested data to said requesting user.

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14. A distributed network as claimed in claim 1, wherein:
said content distributor is adapted to deliver said first and second data as streaming
data to said first and second data servers, respectively.

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15. A distributed network as claimed in claim 1, wherein:
said first and second data each comprises multimedia data.

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16. A data server, adapted for use as one of a plurality of data servers in a
distributed data delivery network, to serve data to respective users, said distributed data
delivery network including a connection network connecting said plurality of data servers
in said distributed data delivery network, and a content distributor adapted to deliver data
to said data servers, said data server comprising:

25 a receiver, adapted to receive data substantially directly from said content
distributor while bypassing said connection network;

25 a data storage, adapted to store at least a portion of said data received by said
receiver; and

30 a user information analyzer, adapted to analyze information from said respective
users pertaining to data to be provided to said users, and to provide user information to
said content distributor to affect distribution of said data by said content distributor to said
data servers.

17. A data server as claimed in claim 16, further comprising:

a data storage controller, adapted to assess said data received by said receiver to determine which of said data is stored in said data storage.

18. A data server as claimed in claim 16, wherein:

5 said content distributor is adapted to deliver said data as streaming data to said data servers; and

said user information analyzer is adapted to provide said user information to said content distributor to affect an order in which said content distributor includes different types of data in said data stream for delivery to said data servers.

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19. A data server as claimed in claim 16, further comprising:

a data delivery component, adapted to deliver data to at least one of said respective users in response to a delivery command provided by a data delivery director in said distributed data delivery network.

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20. A method for delivering data via a distributed network to a plurality of users, the distributed network including a multi-tier server network comprising a plurality of data servers and a connection network connecting said data servers, the method comprising:

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grouping said data servers into at least one first group and at least one second group, such that a said first group comprises at least one first data server adapted to deliver first data to a first group of said users and a said second group comprises at least one second data server adapted to deliver second data to a second group of said users which is a subset of said first group of said users; and

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based on information pertaining to requests for said content by said first and second groups of users, delivering said first data to said at least one first data server and said second data to said at least one second data server while bypassing said connection network.

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21. A method as claimed in claim 20, wherein:

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100 said multi-tier server network further comprises a master group comprising at least one master data server, said master data server being adapted to deliver third data to at least one user in a said first group and at least one user in a said second group; and

5 the method further comprises delivering said third data to said at least one master data server.

22. A method as claimed in claim 21, further comprising:

controlling said at least one master data server to deliver said third data to any said user in said first group and any said user in said second group.

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23. A method as claimed in claim 21, wherein:

controlling said at least one master data server to deliver said third data to each said user in said first group and each said user in said second group.

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24. A method as claimed in claim 20, wherein:

100 said grouping includes locating each second server in said second group electrically closer to its respective said users in said second group of users than a said first server in said first group is to said users in said second group of users.

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25. A method as claimed in claim 20, wherein:

100 said grouping includes geographically distributing said first and second data servers in said first and second groups, respectively, such that each said first data server is adapted to serve said first data to a plurality of second groups of users.

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26. A method as claimed in claim 20, wherein:

100 said delivering step includes delivering at least a portion of said first or second data to at least some of said first or second data servers in said first and second groups, respectively, via a satellite link to bypass said connection network.

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27. A method as claimed in claim 20, wherein:

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5 said delivering step includes delivering said first and second data substantially directly to at least some of said first or second data servers in said first and second groups, respectively, via a distribution network which is distinct from said connection network.

10 28. A method as claimed in claim 20, further comprising:
collecting data from content providers for distribution as said first and second data by said distributing step.

15 29. A method as claimed in claim 28, further comprising:
encoding said data collected by said data collection step to generate said first and second data.

15 30. A method as claimed in claim 20, further comprising:
directing a said first data server or a said second data server to deliver said requested data to a requesting user in response to a data request from said requesting said user.

20 31. A method as claimed in claim 30, wherein:
said directing step includes directing a said second data server to deliver said requested data to said requesting user unless said second data server is incapable of delivering said requested data to said requesting user.

25 32. A method as claimed in claim 30, wherein:
said directing step includes directing a said first data server to deliver said requested data to said requesting user when said second data server is incapable of delivering said requested data to said requesting user.

30 33. A method as claimed in claim 20, wherein:
said delivering step includes delivering said first and second data as streaming data to said first and second data servers, respectively.

34. A method as claimed in claim 20, wherein:

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50 said first and second data each comprises multimedia data.

35. A method for using a data server as one of a plurality of data servers in a
distributed data delivery network, to serve data to respective users, said distributed data
5 delivery network including a connection network connecting said plurality of data servers
in said distributed data delivery network, and a content distributor adapted to deliver data
to said data servers, the method comprising:

10 receiving data at said data server substantially directly from said content distributor
while bypassing said connection network;

15 storing at said data server at least a portion of said data received by said receiving
step; and

20 analyzing information from said respective users pertaining to data to be provided
to said users, and based on said analysis providing user information to said content
distributor to affect distribution of said data by said content distributor to said data servers.

25 36. A method as claimed in claim 35, further comprising:

30 assessing said data received by said receiving step to determine which of said data
is stored in said data storage.

20 37. A method as claimed in claim 35, wherein:

35 said content distributor is adapted to deliver said data as streaming data to said data
servers; and

40 said analyzing step includes providing said user information to said content
distributor to affect an order in which said content distributor includes different types of
25 data in said data stream for delivery to said data servers.

45 38. A method as claimed in claim 35, further comprising:

50 delivering data from said data server to at least one of said respective users in
response to a delivery command provided by a data delivery director in said distributed
30 data delivery network.

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